AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently Amended)** A method for determining the presence of living bacteria or fungus-yeast in a sample by detecting ribonucleic acid (RNA) that comprises a selected target region of ribosomal RNA (rRNA) ~~in a sample suspected of containing said bacteria and/or fungus, wherein said RNA comprises a selected target sequence~~, said method comprising:

(a) ~~providing a~~ extracting ribonucleic acid (RNA) from said sample ~~to be tested or which is suspected of containing particular bacteria or fungus-yeast RNA~~;

(b) incubating said RNA from said sample with DNase;

(~~b~~ c) incubating ~~the bacteria or fungus-yeast~~ said RNA from said sample with a thermostable enzyme with RNA-dependent Reverse Transcriptase activity and with DNA-dependent Polymerase activity and polynucleotide primers that hybridize to the selected rRNA target region of bacteria or fungus-yeast but not of other organisms, under conditions which allow the Reverse Transcriptase activity of said thermostable enzyme to synthesize cDNA from said target region ~~the RNA target sequence~~; and said DNA polymerase activity to amplify said cDNA ~~amplifying the cDNAs formed~~ to a detectable level by Polymerase Chain Reaction ~~with said DNA polymerase activity of the thermostable enzyme and polynucleotide primers~~ and;

(~~c~~ d) detecting the amplified cDNAs from said rRNA target region by hybridization with one or more probe polynucleotide(s) that hybridizes to said amplified cDNAs of bacteria or fungus-yeast but not of other organisms, wherein step (c) and (d) are performed in the same tube by means of one step real time RT-PCR.

2. **(Cancelled)**

3. **(Previously presented)** The method of claim 1 wherein the polynucleotide primers and probe consist of the sequences:

Seq ID No 1	TGGAGCATGTGGTTTAATTCGA	[primer forward]
Seq ID No 2	TGCGGGACTTAACCCAACA	[primer reverse]
Seq ID No 11	TGCATGGYTGTCGTCAGCTCGTG	[probe forward].

4. **(Previously presented)** The method of claim 1 wherein the polynucleotide primers and probe consist of the sequences:

Seq ID No 3	AGAGTTTGATCATGGCTCAGA	[primer forward]
Seq ID No 4	TTACCCCACCTACTAGCTAAT	[primer reverse]
Seq ID No 12	GAGTGGCGGACGGGTGAGTAA	[probe forward]

5. **(Previously presented)** The method of claim 1 wherein the polynucleotide primers and probe consist of the sequences:

Seq ID No 5	GYGGAGCATGTGGYTTAATTCG	[primer forward]
Seq ID No 6	TTGCGCTCGTTRCGGGACTT	[primer reverse]
Seq ID No 13	ACAGGTGGTGCATGGTTGTC	[probe forward]
Seq ID No 14	TCAGCTCGTGTCGTGAGATGTT	[probe forward]
Seq ID No 15	ACAGGTGCTGCATGGCTGTC	[probe forward]
Seq ID No 16	TCAGCTCGTGTTGTGAAATGTT	[probe forward] .

6. **(Previously presented)** The method of claim 1 wherein the polynucleotide primers and probe consist of the sequences:

Seq ID No 7	GGGAAACTCACCAGGTCCA	[primer forward]
Seq ID No 8	CGTTATCGCAATTAAGCAGACA	[primer reverse]

Seq ID No 17 AGGATTGACAGATTGAGAGCTCTT [probe forward] .

7. **(Previously presented)** The method of claim 1 wherein the polynucleotide primers and probe consist of the sequences:

Seq ID No 9 GGTAACGGGGAATWAGGGTTC [primer forward]

Seq ID No 10 TTGGGTAATTTGCGCGCCTG [primer reverse]

Seq ID No 18 CGGAGAGGGAGCCTGAGAA [probe forward]

Seq ID No 19 CGGCTACCACATCCAAGGAA [probe forward] .

8. **(Previously presented)** The method of claim 1 wherein the primers and probes consist of the sequences:

Seq ID No 1+ Seq ID No 2 +Seq ID No 11 + Seq ID No 7+ Seq ID No 8 +Seq ID No 17

or

Seq ID No 3+ Seq ID No 4 +Seq ID No 12 + Seq ID No 7+ Seq ID No 8 +Seq ID No 17

or

Seq ID No 5+ Seq ID No 6 +Seq ID No 13 + Seq ID No 14 + Seq ID No 15 +Seq ID No 16 + Seq ID No 9+Seq ID No 10 +Seq ID No 18 +Seq ID No 19.

9. **(Previously presented)** The method of claim 1 wherein the polynucleotide primers and probes are natural nucleic acid or Peptide Nucleic Acid (PNA) which can hybridize to nucleic acid (DNA and RNA).

10. **(Previously presented)** The method of claim 1 further comprising the step of quantifying the RNA by comparison with a quantified external standard RNA from the group consisting of : *Escherichia coli* and *Candida spp.*

11. **(Currently amended)** The method of ~~claims 1 or 2~~ claim 1 wherein step (a) comprises extracting bacteria or fungus-yeast RNA from the sample ~~up to 1000ml~~ by ~~centrifiltration~~ centrifiltration on membranes and/or DEAE resin ~~followed by incubation with DNAse~~.

12. **(Cancelled)**

13. **(Currently amended)** The method of ~~any one of claims 1 to 4~~ claim 1 wherein the thermostable enzyme is *Tth* DNA polymerase.

14. **(Cancelled)**

15. **(Currently amended)** The method of claim ~~14~~ 1 wherein the polynucleotide primer(s) for synthesizing cDNA by Reverse Transcription are selected from the group consisting of:

Seq ID No 2	TGCGGGACTTAACCCAACA	[primer reverse]
Seq ID No 4	TTACCCCACCTACTAGCTAAT	[primer reverse]
Seq ID No 6	TTGCGCTCGTTRCGGGACTT	[primer reverse]
Seq ID No 8	CGTTATCGCAATTAAGCAGACA	[primer reverse]

Seq ID No 10 TTGGGTAATTTGCGCGCCTG [primer reverse] .

16. **(Currently amended)** The method of claim ~~14~~ 1 wherein the polynucleotide primers for amplifying cDNA by Polymerase Chain Reaction are selected from the group consisting of:

Seq ID No 1	TGGAGCATGTGGTTTAATTCGA	[primer forward]
Seq ID No 2	TGCGGGACTTAACCCAACA	[primer forward]
Seq ID No 3	AGAGTTTGATCATGGCTCAGA	[primer forward]
Seq ID No 4	TTACCCCACCTACTAGCTAAT	[primer forward]
Seq ID No 5	GYGGAGCATGTGGYTTAATTCG	[primer forward]
Seq ID No 6	TTGCGCTCGTTRCGGGACTT	[primer forward]
Seq ID No 7	GGGAAACTCACCAGGTCCA	[primer forward]
Seq ID No 8	CGTTATCGCAATTAAGCAGACA	[primer forward]
Seq ID No 9	GGTAACGGGGAATWAGGGTTC	[primer forward]
Seq ID No 10	TTGGGTAATTTGCGCGCCTG	[primer forward] .

17. **(Currently amended)** The method of claim ~~14~~ 1 wherein the polynucleotide probe or polynucleotide probes for detecting the amplified cDNAs is/are selected from the group consisting of:

Seq ID No 11	TGCATGGYTGTCGTCAGCTCGTG	[probe forward]
Seq ID No 12	GAGTGGCGGACGGGTGAGTAA	[probe forward]
Seq ID No 13	ACAGGTGGTGCATGGTTGTC	[probe forward]
Seq ID No 14	TCAGCTCGTGTCGTGAGATGTT	[probe forward]
Seq ID No 15	ACAGGTGCTGCATGGCTGTC	[probe forward]
Seq ID No 16	TCAGCTCGTGTTGTGAAATGTT	[probe forward]
Seq ID No 17	AGGATTGACAGATTGAGAGCTCTT	[probe forward]

Seq ID No 18 CGGAGAGGGAGCCTGAGAA [probe forward]

Seq ID No 19 CGGCTACCACATCCAAGGAA [probe forward] .

18. **(Currently amended)** The method of claim 9 wherein the polynucleotide probes further ~~compromise~~ comprise a non-radioactive label.

19. **(Previously presented)** The method of claim 18 wherein the non-radioactive label is a fluoroscein.

20. **(Withdrawn)** A kit for determining the presence of bacteria or fungus-yeast ribonucleic acid (RNA) in a sample suspected of containing said bacteria and/or fungus comprising:

(a) a thermostable enzyme with RNA-dependent Reverse Transcriptase activity and with DNA-dependent Polymerase activity;

(b) polynucleotide primers comprising:

(i) a polynucleotide primer or polynucleotide primers for synthesizing cDNA by Reverse Transcription;

(ii) polynucleotide primers for amplifying cDNA by Polymerase Chain Reaction; and

(iii) a polynucleotide probe or polynucleotide probes for detecting the amplified cDNAs.

21. **(Withdrawn)** The kit of claim 20 further comprising centrifiltration membranes and/or DEAE resin for obtaining bacteria or fungus-yeast RNA from a sample.

22. **(Withdrawn)** The kit of claim 20 further comprising DNAse.

23. **(Withdrawn)** The kit of any one of claims 20 to 22 wherein the polynucleotide primers for synthesizing cDNA by Reverse Transcription are selected from group consisting of:

Seq ID No 2 TGCGGGACTTAACCCAACA [primer reverse]

Seq ID No 4	TTACCCCACCTACTAGCTAAT	[primer reverse]
Seq ID No 6	TTGCGCTCGTTRCGGGACTT	[primer reverse]
Seq ID No 8	CGTTATCGCAATTAAGCAGACA	[primer reverse]
Seq ID No 10	TTGGGTAATTTGCGCGCCTG	[primer reverse].

24. **(Withdrawn)** The kit of any one of claims 20 to 22 wherein the polynucleotide primers for amplifying cDNA by Polymerase Chain Reaction are selected from the group consisting of:

Seq ID No 1	TGGAGCATGTGGTTTAATTCGA	[primer forward]
Seq ID No 2	TGCGGGACTTAACCCAACA	[primer forward]
Seq ID No 3	AGAGTTTGATCATGGCTCAGA	[primer forward]
Seq ID No 4	TTACCCCACCTACTAGCTAAT	[primer forward]
Seq ID No 5	GYGGAGCATGTGGYTTAATTCG	[primer forward]
Seq ID No 6	TTGCGCTCGTTRCGGGACTT	[primer forward]
Seq ID No 7	GGGAAACTCACCAGGTCCA	[primer forward]
Seq ID No 8	CGTTATCGCAATTAAGCAGACA	[primer forward]
Seq ID No 9	GGTAACGGGGAATWAGGGTTC	[primer forward]
Seq ID No 10	TTGGGTAATTTGCGCGCCTG	[primer forward] .

25. **(Withdrawn)** The kit of any one of claims 20 to 22 wherein the polynucleotide probe or polynucleotide probes for detecting the amplified cDNAs is/are selected from the group consisting of:

Seq ID No 11	TGCATGGYTGTCGTCAGCTCGTG	[probe forward]
Seq ID No 12	GAGTGGCGGACGGGTGAGTAA	[probe forward]
Seq ID No 13	ACAGGTGGTGCATGGTTGTC	[probe forward]
Seq ID No 14	TCAGCTCGTGTCGTGAGATGTT	[probe forward]
Seq ID No 15	ACAGGTGCTGCATGGCTGTC	[probe forward]

Seq ID No 16 TCAGCTCGTGTTGTGAAATGTT [probe forward]

Seq ID No 17 AGGATTGACAGATTGAGAGCTCTT [probe forward]

Seq ID No 18 CGGAGAGGGAGCCTGAGAA [probe forward]

Seq ID No 19 CGGCTACCACATCCAAGGAA [probe forward] .

26. **(Withdrawn)** The kit of any one of claims 20 to 22 wherein the thermostable enzyme is Tth DNA polymerase.

27. **(Withdrawn)** The kit of any one of claims 20 to 22 for performing a method as defined in Claim 1.

28. **(Cancelled)**

29. **(Cancelled)**